

# Simbolo Series

# Simbolo

Serial | Parallel ATA RAID 6



## Highest Density Available

- ◆ 2U chassis with 8bays carriers.
- ◆ Over 2 Terabytes per chassis.

## Extraordinary performance

- ◆ Serial ATA II: The Next Generation Internal Storage Interconnect.
- ◆ Better connectivity, higher data transfer rates.
- ◆ Advanced Data Guarding technology (RAID ADG) provides the highest level of data protection.
- ◆ RAID ADG can tolerate multiple simultaneous drive failures without downtime or data loss.

## Exceptional Manageability

- ◆ GUI for remote management and configuration.
- ◆ Menu-driven front panel display.

## Unsurpassed value

- ◆ RAID ADG offers lower implementation costs and greater usable capacity per U than RAID 1.

## Features

- ▶ Supports RAID levels 0, 1, 0+1, 3, 5, 6 and JBOD.
- ▶ Supports hot spare and automatic hot rebuild.
- ▶ Allows online capacity expansion within the enclosure.
- ▶ Local audible event notification alarm.
- ▶ Supports password protection and UPS connection.
- ▶ Built-in serial port interface for remote event notification.
- ▶ Dual host channels support clustering technology.
- ▶ Tagged command queuing for 256 commands, allows for overlapping data streams.
- ▶ Transparent data protection for all popular operating systems.
- ▶ RAID ADG provides the highest level of data protection.
- ▶ RAID ADG can tolerate multiple simultaneous drive failures without downtime or data loss.
- ▶ Supports multiple array enclosures per host connection.

## RAID Management

- ▶ Smart-function LCD panel.
- ▶ Environmental monitoring unit .
- ▶ Real time drive activity and status indicators.
- ▶ Browser-based Java GUI management utility.



### Proware Technology Corp.

Tel:886-2-2914-8001(Rep.) Fax:886-2-2914-7975  
http://www.proware.com.tw E-mail:info@proware.com.tw



# Series Technical Specifications

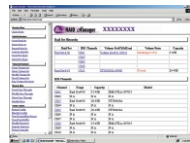


Model	SB-2803SA	SB-2803SI	SB-2803FA	SB-2803FI
<b>Form - factor</b>	2U 19-inch rackmount chassis	2U 19-inch rackmount chassis	2U 19-inch rackmount chassis	2U 19-inch rackmount chassis
<b>RAID processor</b>	Intel 80321 64 bit RISC	Intel 80321 64 bit RISC	Intel 80321 64 bit RISC	Intel 80321 64 bit RISC
<b>RAID level</b>	0, 1, 0+1, 3, 5, 6 and JBOD	0, 1, 0+1, 3, 5, 6 and JBOD	0, 1, 0+1, 3, 5, 6 and JBOD	0, 1, 0+1, 3, 5, 6 and JBOD
<b>Cache memory</b>	128MB ~ 1024MB	128MB ~ 1024MB	128MB ~ 1024MB	128MB ~ 1024MB
<b>No. of channels (host + drive)</b>	2 + 8	2 + 8	2 + 8	2 + 8
<b>Host bus interface</b>	Ultra 320LVD	Ultra 320LVD	FC-AL x 2 (2Gb/s)	FC-AL x 2 (2Gb/s)
<b>Drive bus interface</b>	SATA II	UDMA 133	SATA II	UDMA 133
<b>Data transfer rate</b>	Up to 320MB/Sec	Up to 320MB/Sec	Up to 200MB/Sec	Up to 200MB/Sec
<b>Back plane board</b>	SATA II	UDMA 133	SATA II	UDMA 133
<b>Hot-swap drive trays</b>	Eight (8) 1-inch trays	Eight (8) 1-inch trays	Eight (8) 1-inch trays	Eight (8) 1-inch trays
<b>Hot-swappable power supplies</b>	300W x 2 power supplies w / PFC	300W x 2 power supplies w / PFC	300W x 2 power supplies w / PFC	300W x 2 power supplies w / PFC
<b>Cooling fans</b>	2	2	2	2
<b>Battery backup</b>	Option	Option	Option	Option
<b>Fibre Hub</b>	No	No	Yes	Yes
<b>R-Link Support</b>	Yes	Yes	Yes	Yes
<b>SNMP Protocol Support</b>	Yes	Yes	Yes	Yes
<b>Array roaming</b>	Yes	Yes	Yes	Yes
<b>Power requirements</b>	AC 95V ~ 264V Full Range 6A / 3A at 115V / 230V, 47Hz ~ 63Hz	AC 95V ~ 264V Full Range 6A / 3A at 115V / 230V, 47Hz ~ 63Hz	AC 95V ~ 264V Full Range 6A / 3A at 115V / 230V, 47Hz ~ 63Hz	AC 95V ~ 264V Full Range 6A / 3A at 115V / 230V, 47Hz ~ 63Hz
<b>Environmental</b>				
<b>Relative Humidity:</b>	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing	10% ~ 85% Non-condensing
<b>Operating Temp:</b>	10°C ~ 50°C (50°F ~ 122°F)	10°C ~ 50°C (50°F ~ 122°F)	10°C ~ 50°C (50°F ~ 122°F)	10°C ~ 50°C (50°F ~ 122°F)
<b>Physical Dimensions:</b>	88(H) x 482(W) x 650(D) mm 3.46(H) x 18.98(W) x 25.59(D) inches	88(H) x 482(W) x 650(D) mm 3.46(H) x 18.98(W) x 25.59(D) inches	88(H) x 482(W) x 650(D) mm 3.46(H) x 18.98(W) x 25.59(D) inches	88(H) x 482(W) x 650(D) mm 3.46(H) x 18.98(W) x 25.59(D) inches
<b>Weight</b>	13.5kgs / 29.7Lbs (without drives)	13.5kgs / 29.7Lbs (without drives)	13.5kgs / 29.7Lbs (without drives)	13.5kgs / 29.7Lbs (without drives)

**Function:**

- ◆ New disk auto spare ◆ Host independent ◆ Environment monitor ◆ Online expansion ◆ Continuous rebuild ◆ Online consistency check ◆ Failed drive auto rebuild ◆ Failed drive indicators ◆ Audible alarm ◆ Password protection ◆ E-mail notification ◆ UPS connection ◆ Bad block auto-remapping ◆ Multiple RAID Selection ◆ Online RAID level migration ◆ Background RAID Initialization ◆ S.M.A.R.T.

Specification are subject to change without notice. All company and product names are trademarks of their respective owners.



**1** Proprietary elastic reactance design : Smooth tray-swap experience.

**2** Excellent heat exchangers : Hollow tray's panel.

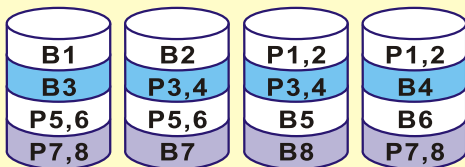
**3** Innovative Modular architecture : Swappable power supplies and cooling fans.

**4** WEB Based GUI RAID Manager: Remote Access status via TCP/IP & Internet



**The benefits of RAID ADG (RAID6) are :**

- ◆ Advanced Data Guarding technology (RAID ADG) provides the highest level of data protection amount RAID levels .
- ◆ RAID ADG can tolerate multiple simultaneous drive failures without downtime or data loss. Greater fault tolerance than RAID 0+1 or RAID 5.



**B** means data blocks **P** means parity data

Any two drives can fail without loss of critical data at same time

**Probability of logical drive failure for different RAID levels**

